## Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

1. (Currently amended) An adaptation method comprising

adapting a <u>variable</u> transmission-parameter <u>data rate</u> in a transmitting node of a data communication system to a current link quality of a data communication channel <u>wherein</u> the transmission-parameter <u>data rate</u> being is selected by the transmitting node from a set of transmission-parameters <u>data rates</u> in <u>dependence depending</u> on a number of successful transmissions, the number of successful transmissions being compared in the transmitting node against one of a first value corresponding to a first state of the transmitting node and a second value corresponding to a second state of the transmitting node, the step of adapting comprising in the transmitting node the steps of:

adapting a variable data-rate to the current link quality and supporting multiple transmission rates:

operating in a first state in response to detecting a successful transmission of three or more but less than ten transmissions;

operating in a second state in response to detecting a successful transmission of ten or more transmissions;

counting the number of successful transmissions;

selecting and switching to the an adapted transmission parameter by switching to a different data rate allowing adaptation of the variable data rate to the current link quality present channel conditions;

in response to the number of successful transmissions equaling or exceeding the first value when the transmitting node is in the first state and

in response to the number of successful transmissions equaling or exceeding the second value when the transmitting node is in the second state; and

in dependence of the success or failure of a subsequent transmission, operating the transmitting node in one of the first state and the second state.

wherein the step of operating the transmitting node in the second state further comprises in the event of a faulty transmission transitioning to the first state, and further comprising; setting the first value to 3 and the second value to 10.

detecting eounting a number of faulty transmissions one a faulty transmission and selecting the a adapted lower transmission data rate parameter in response to the detection of one or more dependence of a threshold of the number of faulty transmissions;

setting the threshold or the number of faulty transmissions to 1; and

selecting the an adapted data transmission-parameter rate used by a responding receiver by selecting a new packet length different from an original packet length being used. [[;]]

wherein the step of selecting the adapted transmission parameter further comprises selecting a different data rate, and

wherein the step of selecting the adapted transmission parameter further comprises selecting a new packet length different from an original packet length being used.

2. - 20. (Canceled)

21 (New) A computer readable storage medium comprising a set of instructions that when executed by a processor cause the computer to perform a method comprising the steps of:

operating in a first state in response to detecting a successful transmission of three or more but less than ten transmissions:

3

Serial Number 10/519327 Docket Number CH920020023US1 Amendment Page 4 of 7

operating in a second state in response to detecting a successful transmission of ten or more transmissions: and

switching to a state of lower data transmission rate in response to detecting one or more defective transmissions by a transmitting node in the network;

wherein the transmission data rate is changed by selecting a new packet length different from an original packet length being used.

## 22. (New) A data communication network comprising:

- a first node comprising a transmitter comprising a variable data transmission rate;
- a second node comprising a receiver; and
- a link connecting the first and second nodes;
- wherein the first node:

operates in a first state in response to detecting a successful transmission of three or more but less than ten transmissions:

operates in a second state in response to detecting a successful transmission of ten or more transmissions; and

switches to a state of a lower data transmission rate in response to detecting one or more defective transmissions by a transmitting node in the network;

wherein the data transmission rate is changed by selecting a new packet length different from an original packet length being used.